

iPad Information Quick Sheet

Hardware

Off line remote GPS capability is a critical feature for field staff and the MGWG has researched and tested a number of devices. We have found Apple products to be the best match for field work related application based on hardware and Apps availability. Here are our recommendations to date:

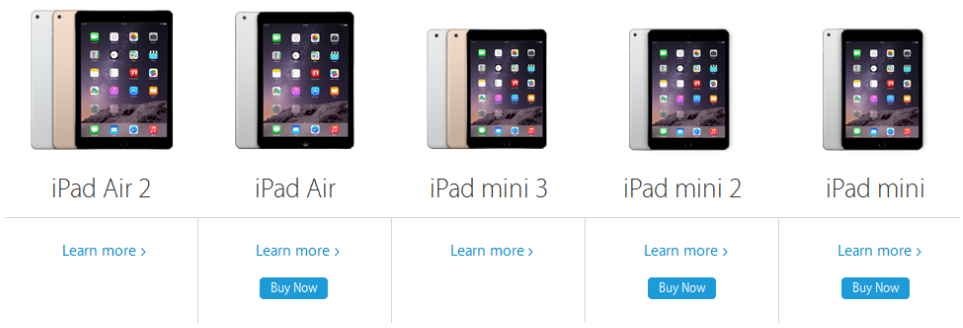
iPhone 4 or later- has an autonomous GPS and will navigate fine off line out of cell connectivity

iPad Mini (retina display) – Wi-Fi + cellular or 3G models have autonomous GPS's. These models start at ~ \$459.00 and go to ~ \$659.00. And remember you do not need to purchase the data plan or get a sim card but you do need to purchase these more expensive models.

iPad Air (retina display) – also referred to as the G5 (generation 5). Wi-Fi + cellular or 3G models have autonomous GPS's and start at \$629.00 and go to \$929.00 based on memory capacity.

If you are using these in the field and will be loading them up with imagery and maps I suggest the 32gb or 64 gb models although in my experience video and photos are by far the biggest memory usage.

<http://www.apple.com/ca/ipad/compare/>



Capacity and Price¹

Wi-Fi:	Wi-Fi:	Wi-Fi:	Wi-Fi:	Wi-Fi:
16GB \$549	16GB \$439	16GB \$439	16GB \$329	16GB \$279
64GB \$659	32GB \$489	64GB \$549	32GB \$379	
128GB \$769		128GB \$659		
Wi-Fi + Cellular:	Wi-Fi + Cellular:	Wi-Fi + Cellular:	Wi-Fi + Cellular:	Wi-Fi + Cellular:
16GB \$689	16GB \$579	16GB \$579	16GB \$469	16GB \$419
64GB \$799	32GB \$629	64GB \$689	32GB \$519	
128GB \$899		128GB \$799		

Protective Cases

For protective cases two types are merging as favourites, Lifeproof and Otter boxes. Life proof are suppose to be submersible and Otter boxes are good in a rain but not submersible. Otter boxes seem to offer better impact protection.

Otter Boxes Cases – Water proof but not submersible, offers the best impact protection,

<http://www.otterbox.com/apple-ipad-cases/apple-ipad-cases,default,sc.html>

Life Proof Nuud Cases – lighter, submersible water proof, but not as much protection offered for a drop, the case can also slightly impede mic and speaker performance

<http://www.lifeproof.com/en/>

Griffin Survivor – A number of staff are using these cases as well. A Dan Sirk recommendation. It is rated to a number of US Military specifications for shock/drop, vibration, sand/dust and driving rain- not immersion though.

Backup Power

Mophie Juice pack – Great combination protective case and external battery.

<http://www.mophie.com/shop/battery-cases-iphone-4s-4/juice-pack-pro-outdoor-edition-iphone-4s-4-1>

Mophie External power for iPad – auxiliary power packs for iPad

<http://www.mophie.com/shop/ipad>

Field Apps Examples

GIS Kit (\$100.00, Pro version with peer to peer data transfer is \$300.00) - This is the main app I recommend for advanced spatial field data collection. It allows you to cache Google and Bing imagery for offline use. It can upload KML and Shapefile formats and download KML. It can collect Points, Lines, and Polygons with iPad GPS or hand draft. It will also collect photo data.

GPS Kit (\$15.00) – This is a much cheaper version of GIS kit. It too can cache Google and Bing imagery for offline use. It will collect tracks and points and will also collect photos. I often use this app to track myself for the day in the background while I use GIS kit for the detail data collection.

Gaia GPS (\$14.99) – This app has very similar functionality to GPS kit. It can cache various map and imagery service from the web for offline use. Using this app or GPS Kit is strictly a matter of personal preference.

Avenza PDF Maps (free for personal use, \$40.00 annual Business use) – This is a really cool free app that uses geo-referenced PDF maps. Geo-referenced PDFs are becoming a government standard and are more and more available. All 1:20,000 trim are available on this FTP site with Veg (Forest Cover on the way). <http://pub.data.gov.bc.ca/datasets/177864/pdf/>

e.g. <http://pub.data.gov.bc.ca/datasets/177864/pdf/093b/093B020.pdf>

This index map viewer can be used to figure out which maps you need to download. :

<http://apps.gov.bc.ca/pub/dmf-viewer/?siteid=5628311639164388216>

The app will also collect point and now line data apparently from their latest update.

Theodolite (\$3.99) – This is a cheap little app that uses the Gyroscope and camera. It allows you to take photos with water marked bearing, elevation, angle, etc. On the photo. These photos can then be used in other apps. A great app for collecting and documenting clues and evidence.

iBitterlick(\$free) – a great app for iPhone 4 and 4s for timber cruising. This app replaces prisms and use the camera and a scale bar to determine tree plot counts. Calculates volume base on tree height and taper.

Field Notes Pro (\$9.99) – This app is great for taking notes in the field because it automatically time stamps the note as well as location stamps it. It will collect notes, photos, audio, and video. Again, this is a great app for evidence and documentation.

Form Connect Pro (9.99) – I am experimenting with this app for SAR. It is real handy for building custom forms and will collect photos and location information. I have created a Missing persons form for testing.

File Maker Go 13 (free) – A great app for using custom developed forms for field data collection. It requires a PC version to develop the forms at a cost of ~\$500.00. Currently this technology is being developed provincially for potential to standardize forms across ministries and departments.

Earthmate (free) – Use this app to connect to Delorme emergency communicators (SPOT competitor). This app works with the Delorme system and allows you to implement 2-way communication through TXT and Email.



Office Apps Examples

DropBox (free) – This is a great app for moving and sharing data between departments and staff. Utilizes cloud space so do not store personal information with it

Pages (Free with new Apple Device) – This app now comes free with any new purchase of an apple device. It is a word processor that works similar to Window's Word. Personally I like it better than Word and it can convert to both PDF and Word.

Numbers (Free with new Apple Device) - This app now comes free with any new purchase of an apple device. It is a spreadsheet application very similar the Window's Excel. It can do basic spreadsheet work very well however it is not good for advanced spreadsheet work using macros.

Keynote(Free with new Apple Device) - This app now comes free with any new purchase of an apple device. This is an app for creating presenatation very similar the Power Point.

GoodReader (\$4.99) – This is a great app for reading and number of different formats from CSV to Txt files. It will also zip and unzip files and is a great app for organizing files on your device.

PDF Expert (\$19.99) – This is a good app for reading and markup of PDF files. It is also used as a field data collection app as It will support writable PDF forms. These writable forms need to be developed in Adobe PDF.

DocScan HD (free) – This is a great app for scanning paper documents and turning them into digital PDF formats. Who needs a photocopier!!!

Notability (\$4.99) – This is a good app for drawing stuff!! I use it to jot down my ideas quickly or share concepts very similar to using a whiteboard.

Receiver (free) – This app is good for running our government desktops remotely. It essentially turns your iPad into a remote control for a windows desktop for our “Basic DTS” or “GTS Kamloops” Desktops

AnyConnect (free) – You need this app to run VPN on your iPad and connect to Government internal web pages

Office 365 (free) – Microsoft recently announced free version of their Office suite for iPad that includes Word, Excel, PowerPoint, OneNote and OneDrive. These come free with limited but quite usable function.

Mail + for Outlook (\$4.99) – Use this app to connect to your government Summer.gov.bc.ca mail account. Make sure you Passcode your device to secure your email in the event of a loss or theft situation